RECLAMATION

Managing Water in the West

Draft Environmental Assessment

County of Fresno Service Area Boundary Change to Include Tract #4870 within Millerton New Town

EA-07-132

U.S. Department of the Interior
Bureau of Reclamation
Mid Pacific Region
South Central California Area Office
Fresno, California

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Table of Contents

Tables

Figures

List of Acronyms, Abbreviations and Definition of Terms

AEWSD	Arvin Edison Water Storage District
af	Acre foot. The quantity of water required to cover one acre of land to a depth of one foot (325,872 gallons).
af/y	Acre-feet per year
APE	Area of Potential Effect
Aqueduct	California Aqueduct
BMP	Best Management Practices
CDPR	California Department of Parks and Recreation
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
cfs	cubic feet per second
Ci of Fresno	City of Fresno
Corps	US Army Corps of Engineers
County	County of Fresno
CSA #34	County Service Area #34
CTI	California Toxics Inventory
CTS	California Tiger Salamander
CV Contractors	Cross Valley Contractors
CVC	Cross Valley Canal
CV EA	Cross Valley Environmental Assessment
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
CWF	California Wildlife Federation
Delta	Sacramento and San Joaquin River Delta
DWR	California Department of Water Resources
EA	Environmental Assessment
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FID	Fresno Irrigation District
FKC	Friant-Kern Canal
FONSI	Finding of No Significant Impact
ft	feet
FWA	Friant Water Authority
FWS	U.S. Fish and Wildlife Service
gpm	gallons per minute
IMP	Interim Management Plan
ITA	Indian Trust Assets
IRC	Interim Renewal Contract
JPJCE	JPJ Inc. Conservation Easement
LAFCO	Local Agency Formation Committee
LMP	Long-term Management Plan

LOA	Live Oak and Associates
LTCR Opinion	Biological Opinion, U.S. Bureau of Reclamation Long Term Contract Renewal of Friant Division and Cross Valley Unit Contractors, January 19, 2001, File Number 1-1-01-F-0027
LTRC	Long-Term Renewal Contracts for CVP water
KCWA	Kern County Water Agency
mi	mile
M&I	Municipal and Industrial
MNT	Millerton New Town
MSP	Millerton Specific Plan
National Register	National Register of Historic Places
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NOAA	National Oceanic Atmospheric Administration formerly National Marine Fisheries Service
NRCS	National Resources Conservation Service
NRDC	National Resources Defense Council
OSNRP	Open Space & Natural Resources Plan
POU	Place of Use
Reclamation	U.S. Bureau of Reclamation
RWQCB	Regional Water Quality Control Board
Settlement	Stipulation of Settlement regarding natural stream flows in the San Joaquin River
SHPO	State Historic Preservation Officer
SJKF	San Joaquin kit fox
SJVAPCD	San Joaquin Valley Air Pollution Control District
State Board	California State Water Resources Control Board
SWP	State Water Project
US	United States
USGS	United States Geologic Survey

Section 1 Purpose and Need for Action

1.1 Background

In 1976, the Cross Valley (CV) Contractors (of which the County of Fresno (County) is one) entered into water service contracts with the Bureau of Reclamation (Reclamation) for Central Valley Project (CVP) water. Through this contract, the County obtained CVP water for delivery to anticipated foothill development near Millerton and Shaver Lakes. The development near Millerton Lake, which is the focus of this Environmental Assessment (EA), is called Millerton New Town (MNT) and has undergone iterations of the County planning process including development of an Environmental Impact Report (EIR), updates of the area's general plan to reflect the development, adoption of a regional plan and specific plan and various amendments to these documents as appropriate as the concept for the development evolved.

The County identified and selected the MNT Specific Plan Area, including Tract 4870, to be the location of expanded development in the foothills near the Fresno area during studies conducted in the early 1980s. The objectives of this early planning process were to identify a suitable site for a new town east of the Friant-Kern Canal (FKC) and between the San Joaquin and Kings Rivers. The County Board of Supervisors adopted the Sierra Regional Plan on May 4,1982. The Sierra Regional Plan identified the Millerton area as the most feasible location for a new town. The Millerton area was selected as the location for a new town for the following reasons: (1) its place in the pioneer history of the County; (2) the absence of highly productive agricultural lands on the designated new town site; (3) the proximity of the area to significant existing recreational opportunities and uses at the Millerton Lake State Recreation Area, and in the nearby foothills and mountains; and (4) the limitation of parceling the surrounding foothill areas by concentrating growth in a defined area.

The Sierra North Regional Plan included a number of elements that directed future planning efforts for MNT. The new community was to be located on 1,400 acres, 1,000 acres of which would be slated for Low Density Residential. The Regional Plan also directed the County to prepare a specific plan for the MNT Reserve. A specific plan was prepared and adopted by the County. Tract 4870 and its supporting infrastructure are included within the adopted MNT Specific Plan (MNT SP). In 1984, the County Board of Supervisors certified the Final MNT SP EIR and adopted the MNT SP for the development of 820 acres of land on the north and south sides of Millerton Road, two miles east of the community of Friant. The project planned for 3,499 housing units and a variety of commercial uses including a golf course, public facilities and open space. The projected population would increase between 8,000 and 10,000 in the County.

The County's MNT SP EIR considered the significant effects of both the Brighton Crest area and the MNT project and found that the changes required in the projects would avoid or substantially lessen the significant effects of the projects related to hydrology, drainage and flooding, energy resources, geology and soils, wastewater disposal, law enforcement and historical/cultural resources.

The County also found that the positive social and economic factors associated with these projects override each of the identified unavoidable environmental impacts related to land use and zoning, vegetation and wildlife, climate and air quality, noise and traffic and circulation, solid waste management, fire protection and schools.

Since the adoption of the MNT SP EIR, land owners within the planning area have worked with the County, as well as state and federal agencies, to develop final plans consistent with the requirements of the specific plan, as well as state and federal regulations. Two landowners within the Specific Plan Area initiated environmental studies in 1997 in consultation with Reclamation, the Army Corps of Engineers (Corps), the Fish and Wildlife Service (FWS), and Natural Resources Conservation Service (NRCS).

John Stebbins, a consulting biologist from Clovis, California, undertook studies of the Specific Plan Area, focusing on threatened and endangered species, and jurisdictional wetlands (Stebbins 1997a, 1997b). In 1997, the Specific Plan Area was surveyed for all the state and federally threatened and endangered plant taxa occurring regionally; and Waters of the United States (US). Jones and Stokes, Inc. surveyed the larger Specific Plan Area for threatened and endangered vernal pool fairy shrimp and other listed crustaceans (Jones & Stokes 1997, Jones & Stokes 1998).

Subsequent to the completion of the 1997 studies, the two principal project proponents for the MNT Specific Plan Area used the information generated during the studies to develop a plan to conserve wetlands and endangered species habitat. This work included the development of a detailed draft management plan for protected wetlands and other significant biotic habitats to be preserved in the open space corridor along White Fox Creek. Since 1997, representatives of both landowners met with staff of Reclamation, the Corps, FWS, and NRCS to discuss natural resource issues and planning options that would meet the regulatory requirements of the resource agencies while remaining consistent with the requirements of the specific plan. The proponents of the project met both formally and informally with Reclamation staff to discuss elements of a mitigation and monitoring plan for the entire planning area (finalized in the form of a County-approved matrix), as well as mitigation, monitoring, and management plans for each individual tract map.

Fresno County Water Works #34 was formed to provide services to the Specific Plan Area. Subsequently, the name was changed to County Service Area # 34 (CSA #34). The boundaries for CSA #34 are the same as MNT including annexations that have occurred. CSA #34 provides services for water, storm drainage, sewer, park and open space maintenance and monitoring, street lighting, landscape maintenance, solid waste collection through contract services, and funding for mitigation monitoring. CSA #34 has an agreement with the County that reserves 1,390 acre feet per year (af/y) of the County's up to 3,000 af/y CVP water service contract entitlement. This water supply was anticipated to meet the demands of the planned and approved development of MNT/CSA #34.

The MNT SP was updated in 1999, and the County approved in that year various environmental documents including the original mitigation and monitoring matrix. The matrix was revised in 2003, following an update to the delineation of jurisdictional waters for the Specific Plan Area. An addendum to the MNT SP EIR was approved in 2004. Currently, MNT/CSA #34 encompasses 1,416 acres total.

The elements of the matrix and the specific management plan reflect the input of the state and federal regulatory agencies that had participated in their development. For example, the plans provide for an open space corridor along the entire length of White Fox Creek. This corridor would facilitate movement from the southeast corner of the planning area to the Sierra foothills. A County requirement to channelize and riprap White Fox Creek for purposes of bank stabilization and flood control was modified to provide for a natural stream corridor that would be both aesthetically pleasing and valuable for wildlife. Development-free buffers were required for both sides of White Fox Creek. The entire planning area (including Tract 4870 and supporting infrastructure) was incorporated into CSA #34. CSA # 34 would assume responsibility for long-term compliance with all mitigation measures committed to in the MNT SP EIR, and required by state and federal resource agencies, and the County-adopted mitigation and monitoring matrix.

Plans to have residential development within the MNT Specific Plan Area fund regional open space preservation were conceived from previous natural resource inventories and planning studies. A group of individuals with significant interest in the preservation of open space in the Millerton area came together in 1999 to form the Millerton Open Space and Natural Resource Plan (OSNRP). These individuals included local landowners within the MNT Specific Plan Area, representatives of the Sierra Foothill Conservancy, a local land trust, the California Department of Parks and Recreation (CDPR), and a consulting biologist. Together they formed an unincorporated association with the power to collect impact fees for every unit constructed within the Millerton area. The mandatory open space impact fee was set a $175 per residential unit, but provision was made for fee increases over time.

The OSNRP has now been formally adopted into the *Millerton Specific Plan Mitigation Measures and Monitoring Matrix*. The Board of Directors of the OSNRP has directed the Sierra Foothill Conservancy to use the funds generated by the impact fees to acquire lands for protection of wetland habitats, as well as habitats known to be used by state and federally listed threatened and endangered species occurring within or near the MNT Specific Plan Area.

In August 2006, the FWS, the County, and the project proponents entered into a cooperative agreement in compliance with, and in furtherance of, the requirements imposed by the County as set forth in the Vegetation and Wildlife section of the *Millerton Specific Plan Mitigation Measures and Monitoring Matrix*. The California Department of Fish and Game (CDFG) is a party to a previous, separate agreement with the project proponents, wherein CDFG determined that, with the implementation of that agreement, and the measures referenced in the *Millerton Specific Plan Mitigation Measures and Monitoring Matrix*, the activities proposed within the MNT Specific Plan Area would not have a significant adverse impact on fish, wildlife, or plants.

Reclamation holds three water rights permits and one water right license under which it appropriates water for the Friant Project at Friant Dam on the San Joaquin River. Only one of Reclamation's three Friant Project water right permits, Permit 11887, authorizes municipal and industrial (M&I) use of water. In 1959, Reclamation petitioned to change the place of use (POU) of all of its Friant Project permits and its license, to add an area around Millerton Lake. The predecessor of the California State Water Resources Control Board (State Board) approved the petition for the license and the two permits that do not authorize M&I use, but did not approve the change of POU for Permit 11887. It is not clear why the POU of Permit 11887 was not changed, and Reclamation was not aware until a few years ago that the POU had not been changed. In the early 2000s, Reclamation realized that the underlying San Joaquin River water rights permit that allows them to deliver M&I water supplies to the County did not encompass most of the development area. To rectify this, Reclamation petitioned the State Board for expansion of the POU for M&I supplies to encompass the portions of the MNT area where tract maps has already been applied for. Amended State Board Permit 11887, issued January 25, 2007, authorized Reclamation to appropriate water for irrigation, municipal, domestic, and recreational purposes, and designated a POU for such water which included an additional 1438 acres of MNT. With this approval, Reclamation would be able to serve water to MNT under its water rights permits.

Meanwhile, development entities within MNT, thinking that after the lengthy planning process that they had undergone they were clear to progress with development, graded Tract 4870. In doing so they eliminated natural drainages and natural habitat on that tract of land.

1.2 Relevant Documents

Sierra North Regional Plan (May 1982) which lays the foundation for Millerton New Town

Preliminary Development Plan (May 1983). This document includes portions of the project description and environmental setting of the Millerton New Town Draft EIR.

Millerton New Town Specific Plan (December 1984).

Draft EIR for the 1984 Millerton New Town Specific Plan (May 1984)

Final EIR for the 1984 Millerton New Town Specific Plan

1999 Addendum to the EIR for the 1984 Millerton New Town Specific Plan associated with General Plan Amendment 455 of 420 acres.

2003 Addendum to the EIR for the 1984 Millerton New Town Specific Plan associated with General Plan Amendment 489 of 156 acres

Open Space and Mitigation Plan for Millerton New Town (October 2003)

County of Fresno Interim CVP Water Service Contract (14-06-200-8292A-IR12 and previous interim renewals) (March 2008)

Biological Opinion on U.S. Bureau of Reclamation Long Term Contract Renewal of Friant Division and Cross Valley Unit Contracts; January 19, 2001, File number 1-1-01-F-0027

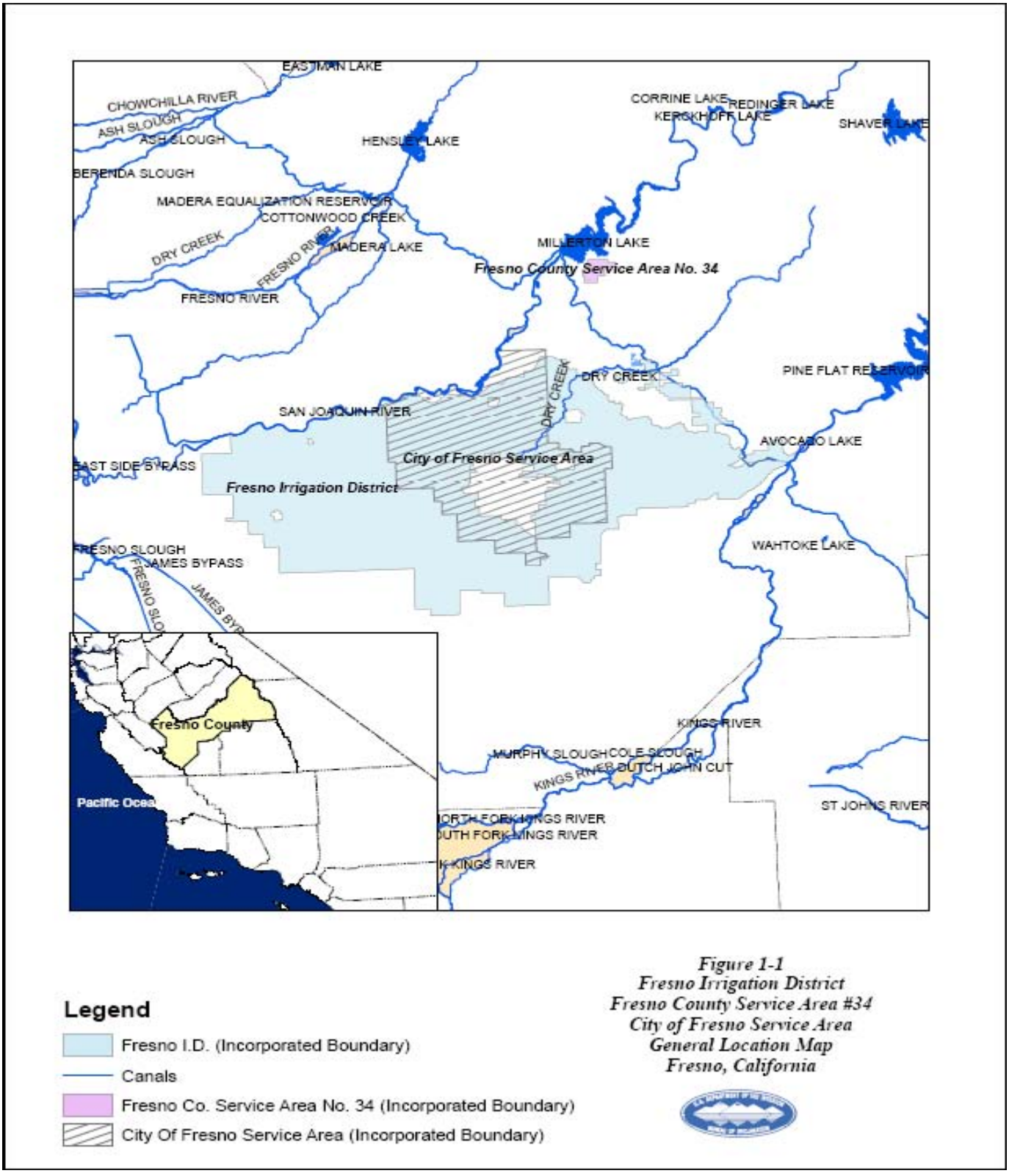


Figure 1 General Location Map of CSA # 34

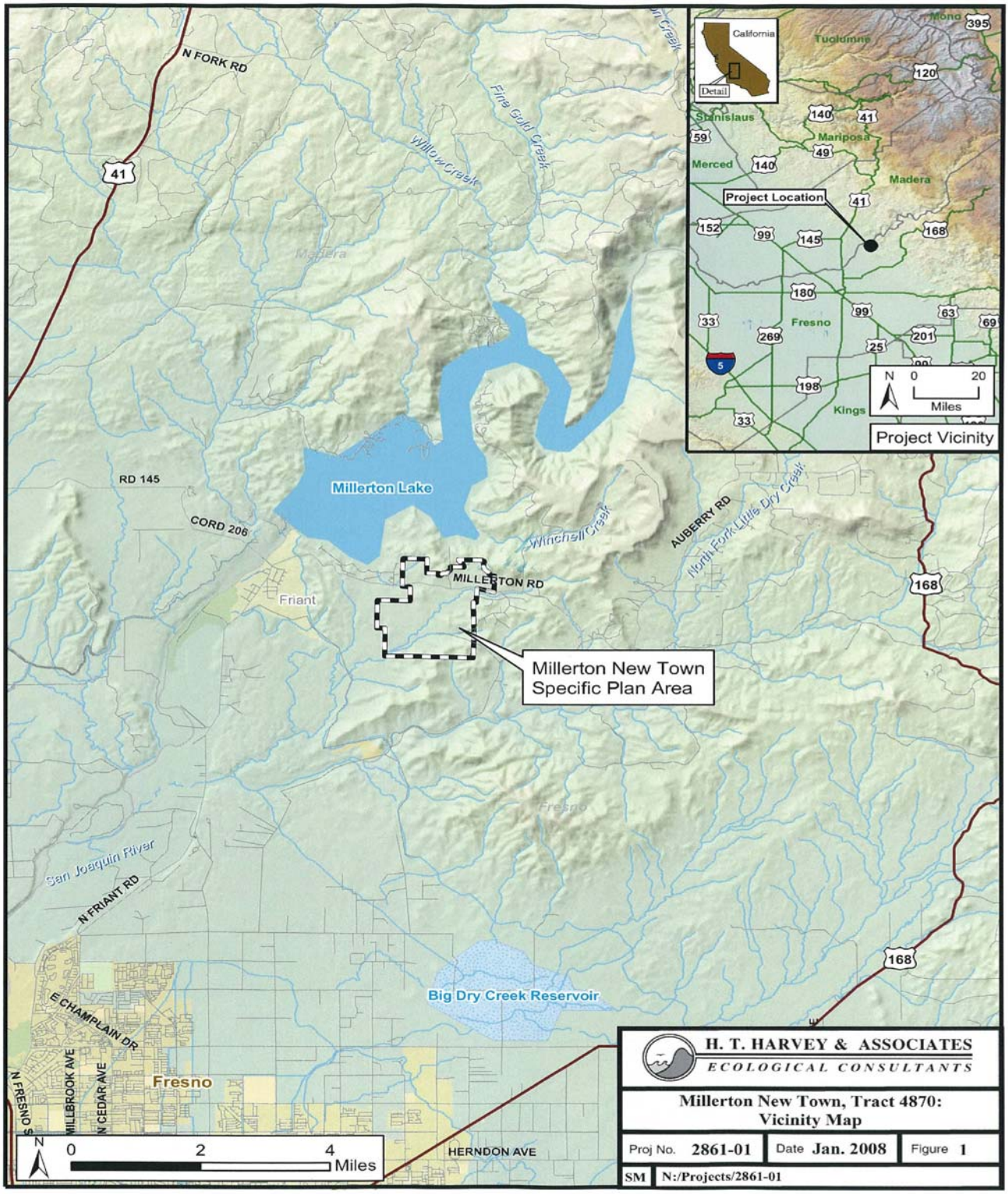


Figure 2 Vicinity map for the Millerton New Town Specific Plan Area in which the Proposed Action would occur.

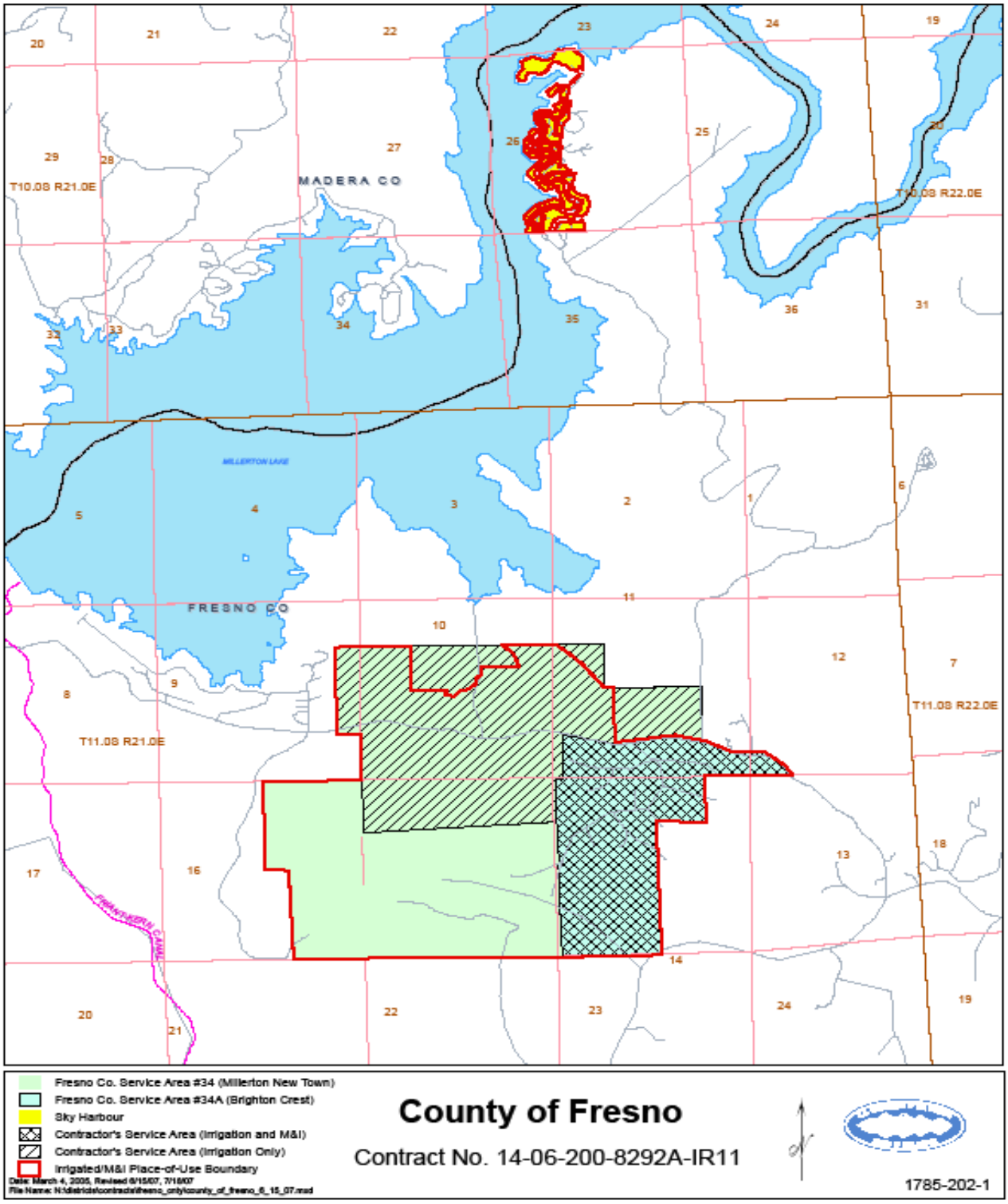
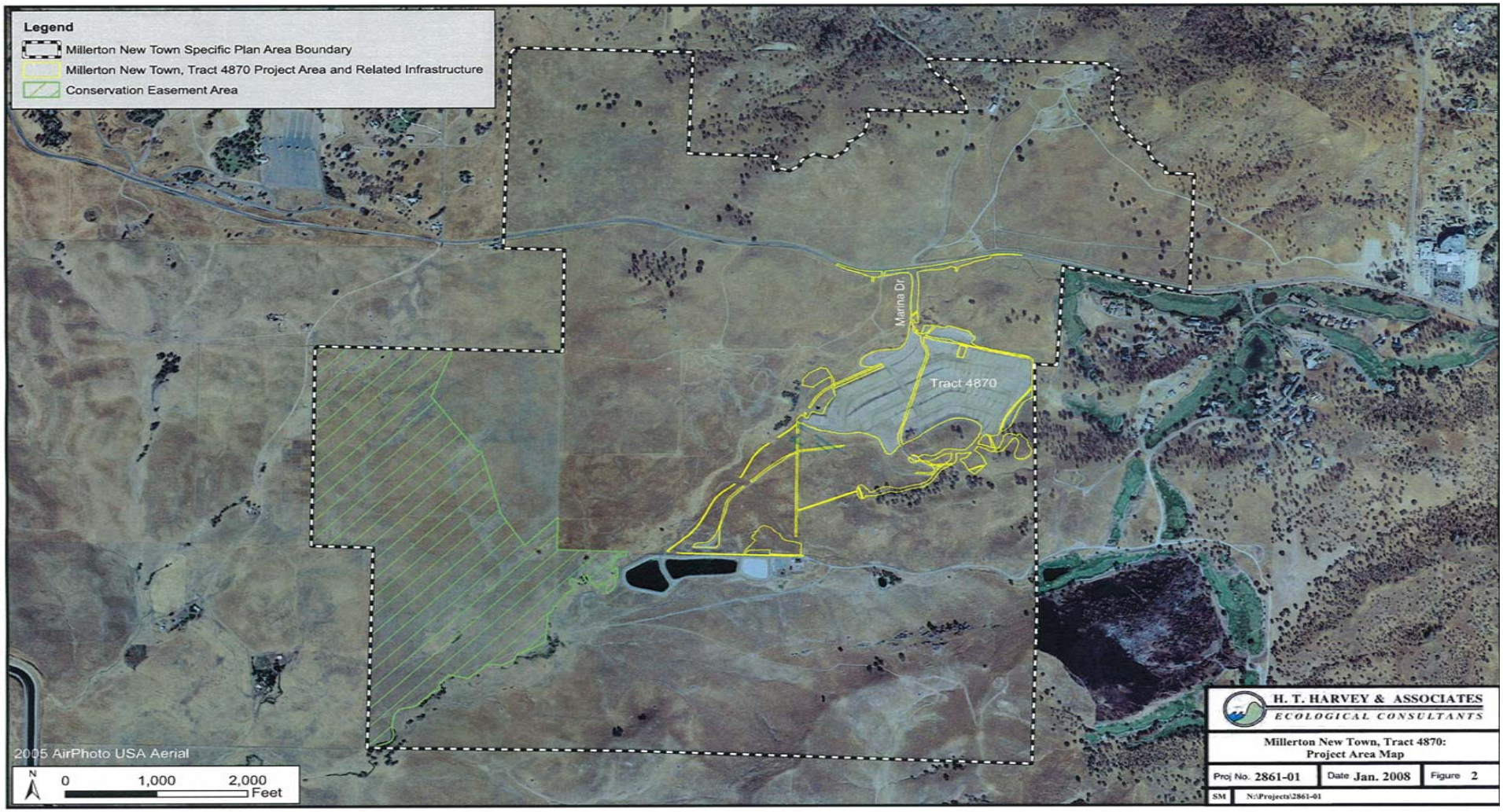


Figure 3 MNT and Brighton Crest and their Current Contract Purposes of Use

Figure 4 Action Areas Map



1.3 Purpose and Need

The development of MNT/CSA #34 has been approved by the County; however, only Brighton Crest (See Figure 3) currently is within the service area boundary for delivery of CVP M&I water supplies under the County's contract. The County has requested that its M&I service area boundaries be expanded to include Tract 4870. The MNT SP and the Adopted MNT Infrastructure Plan "requires each new project to provide an adequate water supply to CSA #34 …. Water supply from Millerton Lake has been allocated for the Specific Plan site and surrounding areas under agreements with CSA #34. This water allocated for use within the CSA #34 boundaries is up to 1,242 af/y …" (Millerton SP 2004)

In order to fully develop the land as planned, a long-term water supply is needed. Currently, Reclamation's service area boundary for delivery of M&I CVP water only encompasses the adjacent subdivision of Brighton Crest. CSA #34 Tract 4870 needs a reliable long-term M&I water supply to allow development of the tract. The change in service area boundary would allow CVP water to be used as the Tract 4870 water supply and would provide the required reliability to meet the demands for planned development on Tract 4870.

The water for Tract 4870 needs to be accessible to the water treatment facility built for CSA #34 and provided at a reasonable expense to the homeowners of the area. Application of the County's as yet not fully utilized CVP water supply in this area as originally envisioned would meet the objectives of accessibility and cost containment.

Additionally, the project proponent has a need to develop a portion of the land quickly since significant funds have been expended in planning, mitigation and infrastructure development. Beginning to recoup this investment is critical for the financial viability of the project.

1.4 Scope

Changes in the CVP Contractors' boundaries and service area change requests are often misconstrued. Reclamation does not have land use change approval authority. However, Reclamation must determine whether boundary change requests would be consistent with the Reclamation Reform Act, water rights permits or other laws and regulations. During this determination and approval process, Reclamation evaluates any proposals for boundary changes as they relate to the use of the water and prepares environmental documents in accordance with National Environmental Policy Act (NEPA) prior to Reclamation's approval.

This EA has been prepared to examine the impacts on environmental resources as a result of expanding the County's CVP contractual M&I service area by 83 acres. This expansion would allow a reliable supply of water to be provided to the new planned development. The water

would be delivered for M&I purposes to new homes and development. The water would be delivered inside the San Joaquin River M&I POU boundary.

The action area for purposes of this EA encompasses all or portions of the following: 1) lands proposed for development within the MNT Tract 4870, including all supporting infrastructure, and upgrades to the existing wastewater treatment plant south of Millerton Road and east of the FKC, and 2) proposed open space conservation areas within the MNT Specific Plan Area. An overview of the action area is provided in Figure 4. The action area occurs within Friant United States Geologic Survey (USGS) 7.5-minute quadrangle, Township 11 south, Range 21 east, portions of Sections 9, 10, 15, and 16 which are all in the County.

This EA examines the environmental effects of including Tract 4870 into the County's CVP M&I service area which would provide a water supply for the homes to be built on this tract. Since this tract has been graded, the environmental quality of this land with respect to several resources has been changed and is very different from the environmental characteristics of the remaining undeveloped portions of CSA # 34. Simultaneously in another document, Reclamation is evaluating the possibility of including the entire recently State Board approved M&I POU area into the County's CVP water service delivery boundary however due to the need for expediency in moving forward with developing Tract #4870 and its different environmental character, this EA only addresses the inclusion of Tract #4870.

1.5 Related Actions

Cross Valley Canal Unit Long Term Contract Renewal Final EA

A Finding of No Significant Impact and final EA, Cross Valley Unit Long Term Contract Renewal, dated January 19, 2001 (CV EA) was prepared by Reclamation to analyze the impacts associated with the renewal of a long-term (25 years) water service contract with the CV Contractors. This CV EA is hereby incorporated by reference into this EA. As stated above, the County is a CVP contractor and is part of the Cross Valley Contractors. The long-term renewal of the CV contracts was evaluated within this document. The long-term contracts have not yet been renewed however due to environmental issues related to Reclamation's pumping in the Delta.

Biological Opinion on U.S. Bureau of Reclamation Long-Term Contract Renewal of Friant Division and Cross Valley Unit Contractors.

The Friant Division requested a formal consultation with the FWS pursuant to section 7 of the Endangered Species Act (ESA), as amended, as part of renewal of 28 long-term water service contracts. Reclamation committed to initiating consultation on other aspects of the CVP so that interrelated and interdependent impacts, and cumulative impacts on species outside the San Joaquin Valley could be fully addressed. With that in mind, the FWS issued its Biological

Opinion (BO) on October 15, 1991 and Amendment of the BO on May 14, 1992. In their BO, the FWS stated that renewal of the 28 long-term contracts would not likely jeopardize the continued existence of 15 threatened and endangered species found within the Friant Division service area, provided Reclamation implement short and long-term endangered species conservation programs to mitigate the adverse impacts of continued CVP water delivery to the Friant Division. This program also committed the FWS to participate by providing technical assistance and developing revised recovery plans for the San Joaquin Valley species needed for the timely resolution of listed species concerns. With contract renewal, the Friant Division Project would continue to fulfill CVP purposes, while avoiding adverse impact to threatened and endangered species.

The BO, *U.S. Bureau of Reclamation Long Term Contract Renewal of Friant Division and Cross Valley Unit Contractors*, January 19, 2001, File Number 1-1-01-F-0027 (LTCR Opinion) was prepared by the U. S. Fish and Wildlife Service (FWS) to address the proposed renewal by Reclamation of water service contract with the Friant Division and CV Units of the CVP in accordance with Section 7 of the ESA. The FWS concluded that the renewal for 25 years of the CVP water service contract is not likely to jeopardize 34 listed species. However, transfers and or exchanges involving Friant Division or CV Contractors were not addressed by the LTCR Opinion. The LTCR Opinion did not address some of the species and critical habitats covered in this EA, because their listings/designations occurred after the LTCR Opinion was issued. These species and critical habitats are: the vernal pool fairy shrimp, the vernal pool tadpole shrimp, all critical habitats for vernal pool species, and critical habitat for the California tiger salamander.

Biological Opinion on the Operations and Maintenance Program on Bureau of Reclamation Lands within the South-Central California Area Office

The FWS issued this BO (O&M BO) (l-1-04-F-0368), dated February 17, 2005, for routine operations and maintenance activities on South-Central California Area Office lands in San Joaquin, Stanislaus, Merced, Madera, Fresno, Santa Clara, San Benito and Contra Costa Counties. The O&M BO addressed effects on the California tiger salamander, vernal pool fairy shrimp, valley elderberry longhorn beetle, blunt-nosed leopard lizard, vernal pool tadpole shrimp, San Joaquin woolly-threads, California red-legged frog, giant garter snake, San Joaquin kit fox, and proposed critical habitat for California tiger salamander, and California red-legged frog. The FWS concurred that the Proposed Action was not likely to adversely affect the Conservancy fairy shrimp, longhorn fairy shrimp, succulent owl's clover and its critical habitat, Hoover's spurge and its critical habitat, the giant kangaroo rat, California condor, bald eagle, delta smelt, San Joaquin adobe sunburst, California clapper rail, salt marsh harvest mouse, Greene's tuctoria and its critical habitat, San Joaquin Valley Orcutt grass and its critical habitat and critical habitat for the vernal pool fairy shrimp and vernal pool tadpole shrimp.

EA for the Interim Contract Renewal for the Cross Valley Contractors

Reclamation prepared Environmental Assessment (EA) 07-75 titled "*Environmental Assessment for 2008 Renewal of Interim Water Service Contracts Through February 28, 2010"*, dated December 2007, to determine the environmental effect of actions resulting from the execution of 15 interim contracts (including Fresno County's contract) for up to two years (March 1, 2008 through February 28, 2010.) Previous interim renewal EAs and supplements have been prepared and approved as follows:

- the 1994 Interim Renewal Contracts EA (Reclamation 1994) which covered the contract years 1994 through 1997,
- the 1998 Supplemental EA (Reclamation 1998) which covered the contract years 1998 and 1999,
- the 2000 Supplemental EA (Reclamation 2000) which covered the contract year 2000,
- the 2001 Supplemental EA (Reclamation 2001) which covered the contract year 2001,
- the 2002 Supplemental EA (Reclamation 2002) which covered the contract years 2002 and 2003,
- the 2004 Supplemental EA (Reclamation 2004) which covered the contract years 2004 and 2005, and
- the 2006 Supplemental EA (Reclamation 2006) which covered the years 2006 and 2007.

This 2008 EA summarized and updated information from the 2006, 2004, 2002, 2001 or 2000 Final Supplemental EAs. The analysis in the 2008 EA and the previous EAs found in large part that the interim renewal of the contracts is in essence a continuation of the "status quo," that is, they continue the existing use and allocation of resources (i.e., the same amount of water is being provided to the same lands for existing/ongoing purposes).

1.6 Potential Issues

Resource issues evaluated in detail in this EA focus on the following:

- Water Resources
- Drainage and Runoff
- Land Use Resources
- Biological Resources
- Traffic and Circulation
- Air Quality
- Cultural and Historical Resources
- Socioeconomic Resources
- Indian Trust Assets
- Environmental Justice

The following resources issues have been dropped from further consideration because the Proposed Action would not result in impacts to the resources:

- Recreational Resources
- Geology and Soils
- Visual Resources

Section 2 Alternatives Including Proposed Action

2.1 No Action

Under the No Action Alternative, Reclamation would not approve the inclusion of Tract 4870 into the County‘s CVP water service contract M&I service area boundary. CVP water supplies would not be used to serve developments built on this tract.

2.2 Proposed Action

Reclamation proposes to approve the inclusion of Tract 4870, consisting of 83 acres, into the County’s contractual M&I service area boundary. This would allow Reclamation to deliver the County’s CVP water supply to Tract 4870. This land is not currently in any CVP contractor’s service area boundary; however, it is within Reclamation’s place of use for delivery of M&I CVP supplies diverted from the San Joaquin River.

The Tract 4870 development area is located on 83 acres entirely within the MNT Specific Plan Area. Approximately 13.06 acres of Tract 4870 would be preserved as open space. Constructed elements on the remaining 69.94 acres of Tract 4870 include:

- residential lots and internal roadways,
- a storm water basin,
- propane storage areas,
- Marina Drive,
- Millerton Road expansion areas,
- two water tanks and service roads to the tanks,
- a sewer main from Tract 4870 to the existing sewer treatment plant,
- water mains to the water treatment plant and to Tract 4870, and
- haul roads associated with the grading for Tract 4870.

Expanding the County’s service area boundary for delivery of CVP water to Tract 4870 is envisioned in this proposal are provided for under Article 35 of the County’s water service contract with Reclamation. This change in M&I delivery boundaries was made possible through recent State Board action to expand Reclamation's M&I POU under Permit 11887 (as previously discussed in the Background Section of this document).

All tertiary treated effluent from the wastewater treatment plant, including effluent from Tract 4870, would be used to irrigate existing golf course greens within the Brighton Crest development to the east. Construction access to Tract 4870 would be via the Marina Drive alignment off of Millerton Road (Figure 4). All new homes would be installed with meters to encourage water conservation.

2.2.1 JPJCE Conservation Easement

The JPJ, Inc. Conservation Easement (JPJCE) for the MNT Tract 4870 development project is a 196.59-acre area (Figure 6) implemented as part of the Proposed Action to conserve habitat for the federally listed species, including California tiger salamander (*Ambystoma californiense*) and vernal pool fairy shrimp (*Branchinecta lynchi*). The acreage is representative of grasslands and wetlands, including several specialized vernal pool habitat types, located in eastern Fresno County, California.

The management and monitoring plan for the JPJCE contains a two-tiered approach to maximize the MNT Project's long-term contribution to recovery efforts for plants and animals dependent on vernal pool ecosystems: an Interim Management Plan (IMP) and Long-term Management Plan (LMP). The IMP acknowledges that future projects within the MNT Specific Plan Area would include conservation measures, including permanent, off-site habitat protection and management, and that a greater conservation benefit may be achieved through the preservation and management of a single, larger area of equal or greater habitat quality outside of the MNT Specific Plan Area. The identification and agency approval of a larger alternative site providing greater conservation value is anticipated to occur within approximately 5 years. Thus, the IMP is designed to manage and monitor conditions within the 196.59-acre easement area during this 5-year period, or longer if approved by FWS.

The LMP addresses the requirement to ensure that conservation measures are fully implemented, whether or not an alternative conservation site is located. The LMP would be implemented if an alternative conservation site is not located and preserved.

2.2.2 Tract 4870 Contributions to the Millerton New Town Open Space Preserve

Consistent with the Millerton Specific Plan (MSP) Mitigation Measures and Monitoring Program Matrix, Live Oak Associates, Inc. (LOA 2004) completed a wetland and open space mitigation and monitoring plan for Tract 4870 to address measures 16.a through 16.h in the matrix. The conservation measures described in the wetland and open space mitigation and management plan would be implemented as part of the Proposed Action. The mitigation and monitoring measures found in the matrix apply primarily to the open space corridor along White Fox Creek. The implementation of these measures is intended to maximize the value of open space habitat, while providing regular biological monitoring that would evaluate the success of the measures designed to mitigate impacts to vegetation and wildlife resources of Tract 4870 (with related

infrastructure). It is important to note that the open space planning for Tract 4870 (with related infrastructure) was part of a broader effort to preserve a contiguous area of open space along White Fox Creek and a number of tributaries. The open space corridor begins at the northeast corner of the MNT Specific Plan Area and continues in a southwesterly direction through Tract 4870 to the southwest corner of the Specific Plan Area.

Mitigation measures required by the MSP, Mitigation Measures and Monitoring Program Matrix are organized by general category. Measures 16.a through 16.e are measures to be incorporated into the design of the residential development plan. Measure 16.f identifies required elements of the open space mitigation and management plan. Measures 16.g and 16.h require that each tract of the MNT Specific Plan Area would be part of an open space district, and that mitigation fees would be collected for the acquisition and preservation of open space parcels nearby. A general description of the mitigation measures relevant to Tract 4870 (with related infrastructure) and the related habitats is provided below. Full descriptions are provided in the wetland and open space mitigation and monitoring plan completed by LOA (LOA 2004).

Measure 16.a. Existing healthy oaks shall be preserved through setback and use restrictions within the dripline.

Final designs for the development of Tract 4870, including the related infrastructure, would avoid existing blue oak trees to the extent practicable; however, several individual trees may be impacted by the Proposed Action.

Measure 16.b. Habitat would be enhanced through development of parkways and other urban landscape areas.

The primary parkway feature would be the open space corridor along White Fox Creek. Within Tract 4870 this open space corridor would be 10 ft to 400 ft in width. Smaller buffer zones relate only to proposed road crossings and the detention basins, and not home sites.

White Fox Creek currently carries winter runoff and summer tailwater from the Brighton Crest golf course and Table Mountain Casino located to the north and east of the Action Area. During wet winters, White Fox Creek may carry flows from mid to late November through April or May. Summer flows have been known to begin shortly after irrigation begins at the Brighton Crest golf course. In recent years, summer flows in White Fox Creek have been greatly reduced. Presumably, golf course managers are now using water more efficiently, thus reducing the amount of runoff into the creek.

Measure 16.c. Vegetation species would be selected for erosion control, aesthetic value, and habitat improvement for parks, school areas, and scenic corridors.

The primary habitat enhancement measure for Tract 4870 would be the establishment of native riparian vegetation along White Fox Creek. A substantial opportunity exists for enhancing and

creating riparian habitat of significant local value along the reach of White Fox Creek flowing through Tract 4870. The enhancement plan for Tract 4870 includes the establishment of a closed-canopy riparian woodland, with occasional breaks, and establishment of three to four species of native grasses.

Measure 16.d. "No shooting" and "leash law" districts should be established for the Millerton Community in keeping with existing Fresno County Policy in these areas.
According to the MSP, Mitigation Measures and Monitoring Program Matrix, this mitigation measure would be the responsibility of the Fresno County Public Works and Development Service Department. Provisions for these restrictions have already been adopted as authorized powers of CSA # 34, which includes Tract 4870.

Measure 16.e. The Landscape Plan for the Inn and Conference Center proposed under Conditional Use Permit No. 2865 shall include the substantial use of native plant species.
The construction of the inn and conference center is a separate project outside of Tract 4870 (with related infrastructure.)

Measure 16.f. Prior to recordation of a Final Tract Map or Site Plan Review approval, a Wetland and Open Space Mitigation Plan and a Monitoring Program shall be developed by the project proponent and approved by the County through consultation with the California Department of Fish and Game (Department) for lands of the Specific Plan Area.
The Wetland and Open Space Mitigation Plan and a Monitoring program was completed for Tract 4870 in 2004 by LOA. As currently planned, the development plan of Tract 4870 provides for an open space corridor along White Fox Creek and White Fox Creek and its tributaries would not be filled by the project. The hydrology of a 0.03-acre isolated wetland swale claimed by the Corps in 2002 (verification number 200200591) was presumably modified as result of the grading that occurred in the spring of 2004 to construct level terraces for home sites. A survey by LOA in 2007 found that upland vegetation dominated this swale, redoximorphic features were absent, and no wetland hydrology indicators were present. The project proponent would obtain the appropriate Corps permits for the action.

Infrastructure improvements connecting homes within Tract 4870 to the existing wastewater treatment plant are currently designed to avoid three seasonal wetland swales connecting to White Fox Creek by spanning the swales or micro-tunneling under the swales. If a decision is made to work within these Corps regulated habitats, approximately 0.204 acres of jurisdictional wetlands spanning less than 300 linear ft would be temporarily affected. This activity, should it occur, would comply with the provisions of Corps Nationwide Permit No. 29, which applies to residential developments, such as the Tract 4870 development, impacting less than 0.5 acres of non-tidal waters of the U.S., including no more than 300 linear ft of streambed. Should these wetlands be affected, a Water Quality Certification from the Regional Water Quality Control

Board (RWQCB) would also be obtained in compliance with Section 401 of the Clean Water Act.

Measure 16.g. The project proponent shall participate in the formation of an OSNRP for the Millerton, Dry Creek, and Sierra Foothill areas.

The OSNRP would provide protection of sensitive resources by establishing key habitat areas, open and continuous wildlife corridors, ridgetop and view protection, native plant landscapes, and lighting restrictions on hilltops to mitigate glare. The Millerton OSNRP was developed partially in response to Mitigation Measure 16.g and 16.h. In 1999, a group of developers, biologists, and land managers who were collectively interested in the preservation of the natural resources of the Millerton area drafted the Millerton OSNRP to be administered by a board of directors and to be implemented according to an adopted "Articles of Organization". The geographic area covered by the plan is the entire MNT Specific Plan Area, including Tract 4870 (with related infrastructure). The plan calls for the collection of "impact fees" for each residential unit constructed in the area covered by the plan. These fees are to be paid to the Sierra Foothill Conservancy for the acquisition of land and protective easements on lands in and around the Millerton area where future development would occur. Tract 4870 would generate fees that would be paid to the Sierra Foothill Conservancy for the purchase of conservation easements on open space parcels in the area. The Sierra Foothill Conservancy has targeted parcels on McKenzie Table, Big Table, and in the Sierra foothills adjacent to these geologically unique landforms for acquisition or conservation easement. These lands are within 2 to 5 mi of Tract 4870. Therefore, the development of Tract 4870 (with related infrastructure) would contribute to the mitigation of cumulative impacts that may result from future regional development.

Measure 16.h. The project proponent shall pay a fair share of the mitigation fees established by the OSNRP consistent with other projects within the OSNRP area, taking into account previous development commitments recognized in the Millerton Specific Plan and the project conditions of approval that already include open space set-aside and other protection measures.

According to provisions of the Millerton OSNRP, the project proponent would pay impact fees. The impact fee per housing unit would be based upon a rate of $175 per unit set in 1999, adjusted for inflation.

2.3 Past, Present and Reasonably Foreseeable Future Actions not Part of the Proposed Action but Related to Cumulative Effects

2.3.1 Cross Valley Expansion Project and Intertie with Friant-Kern Canal

The CVC Expansion Project has expanded the capacity of the CVC. This project included construction to increase the capacity and turnouts to deliver water to groundwater banking facilities and across the CVC. This project was complete in early 2008.

2.3.2 Article 5 Exchange

Reclamation evaluated the approval of CV Contractors' exchange arrangements as individually proposed with exchangees in addition to Arvin Edison Water Storage District (AEWSD) in the 2008 contract year for up to the full CV Contractors' CVP contract supply of 128,300 af/y. Many potential exchangees, both federal and non-federal were identified in the EA. Under the Proposed Action these imbalanced exchanges were limited to a 2:1 ratio.

2.3.3 Development of Local Subdivisions that are Part of CSA #34 but not Part of Tract 4870

The information below describes the entire build out of CSA #34 including the number of type and number of units to be developed and the amount of water needed for that development. It is designated by the source of the water proposed to be supplied:

1. Cross Valley Contract water (1,520 acre feet):

   (a) 841 af for Brighton Crest, Tract 4048 which will be used in CSA-34A:

      (1) Golf Course = 400 af and 420 units ( )

   (b) 679 af which will not be used Brighton Crest CSA-34:

      (1) Tract 4870, 161 residential units – 88 af ( )
      (2) Tract 4968, 308 residential units - 169 af ( )
      (3) Tract 5430, 570 residential units - 313 af ( )
      (4) Clovis School - six af ( )
      (5) CUP 2865/3035 Commercial - 85 af ( )
      (6) Unmapped 33 Clarksfield residential units in Specific Plan Area H – 18 af

      Total non-Brighton Crest CSA-34 af - 679

2. Total Projected Deer Creek and Tule River Authority (770 af):

(a) Tract 5393, 275 residential units - 151 af – **Clarksfield** ()
(b) Tract 5771, 79 residential units - 43 af – **Clarksfield** ()
(c) Tract 4934, 200 residential units - 110 af – **JPJ** ()
(d) Tract 4976, 119 residential units - 65 af – **JPJ** ()
(e) JPJ, 250 af for residential units in Allocation Area G not yet mapped ()
(f) Five acres of Neighborhood Commercial/GPA 489 – 10 af ()
(g) 66 Resort Villas, CUP 2865/3035, GPA 489 - 36 af ()
(h) Three acres CM Commercial, GPA 489 - three af ()
(i) 15 acres RE, GPA 489 - 17 af ()
(j) 15 acres Commercial, northwest corner Winchell Cove and Millerton Road – 24 af ()
(k) Tract 5594, 79 units (this project is currently outside of the Place of Use and on groundwater, but a supply equal to actual usage will be used for CSA-34 Recharge – 43 af ()

Total af: 752

C. <u>Miscellaneous:</u>

1. Residential uses based on 0.55 af per year per residence,
2. There will also be some water freed up by the use of tertiary treated recycled water, particularly on the Brighton Crest Golf Course.
3. There is some additional water, about 20 annual af of the Deer Creek supply, to be used in Clarksfield Projects. It is proposed to use this as a cushion for the approved Clarksfield commercial projects.

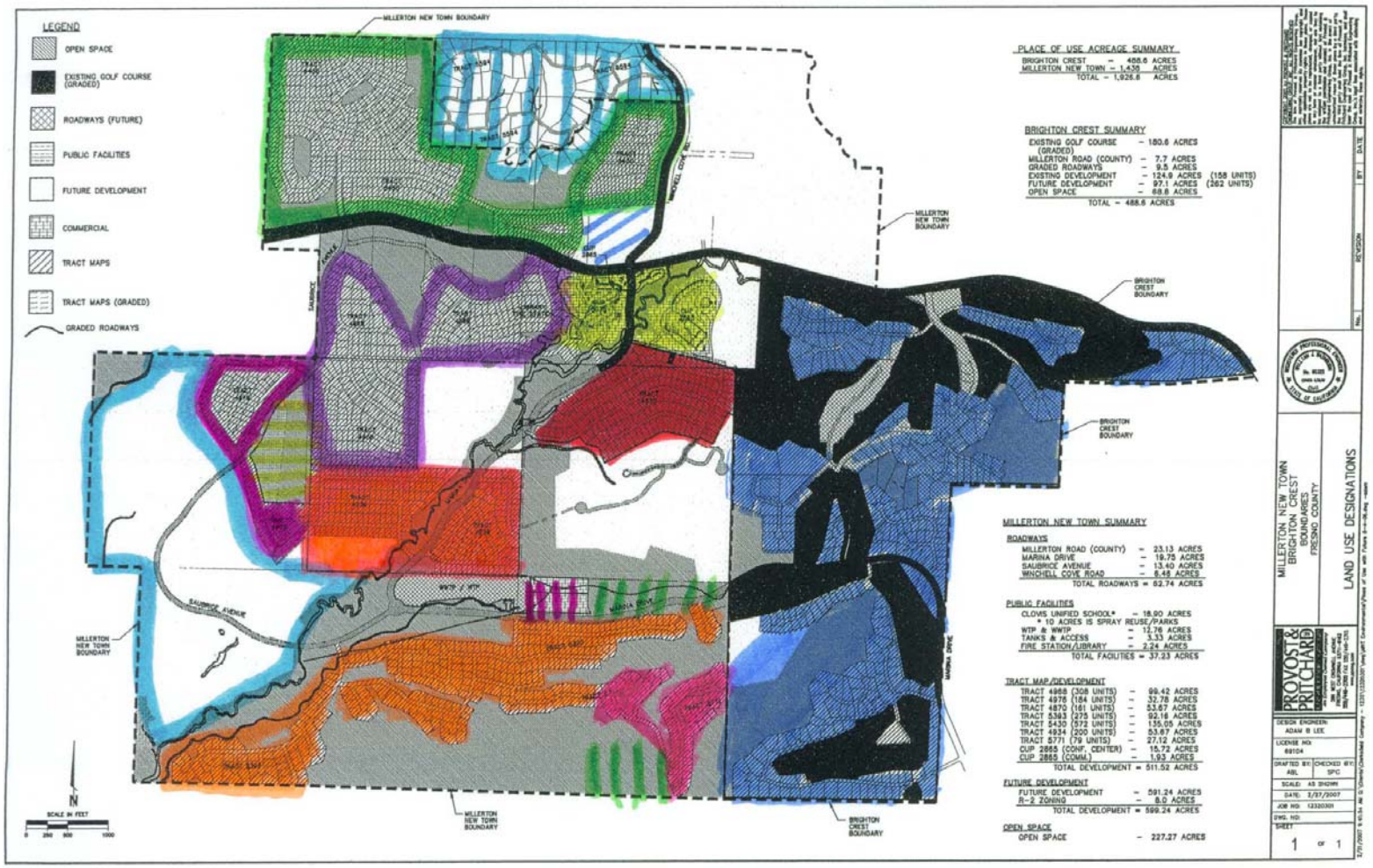


Figure 5 Developments in CSA #34

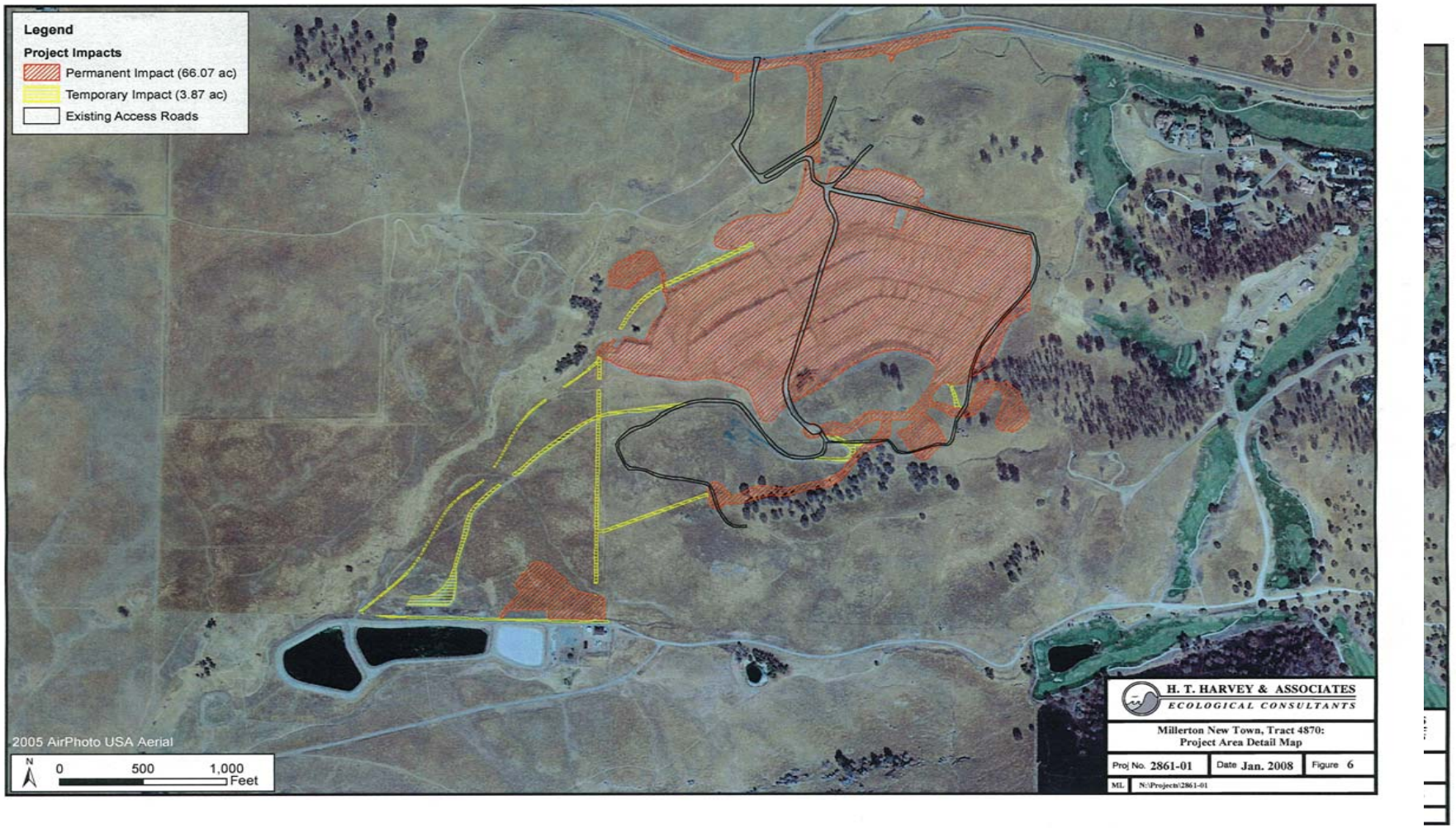


Figure 6. Biological Impact Areas of Tract 4870 development within the Millerton New Town Specific Plan Area.

2.3.4 San Joaquin River Restoration

Over a century of water development in the San Joaquin River basin has contributed to the economic growth of the region, state, and nation through many industries, most notably agriculture. Restoration efforts, as result of a settlement between the Friant Water Users Authority and the National Resources Defense Council, have been on-going since 2007 and initial new flows are expected in the San Joaquin River in 2009.

Section 3 Affected Environment & Environmental Consequences

The context for this EA is the valley floor of the San Joaquin Valley and the foothills near Millerton Lake within the County. This section identifies the affected environment, conditions that currently exist, and the areas of concern that may be affected by the Proposed Action.

3.1 Water Resources

3.1.1 Affected Environment

Cross Valley Contractors

The County is a CV Contractor. In 1976, the CV Contractors entered into water service contracts with Reclamation for CVP water. Although the CV Contractors, including the County, are situated on the east side of the San Joaquin Valley amongst the Friant Division CVP contractors, the CV Contractor's CVP water is delivered in the Sacramento and San Joaquin River Delta (Delta) by Reclamation where the State Water Project (SWP) pumps the water through the Harvey O. Banks Pumping Plant into the California Aqueduct (Aqueduct) for conveyance. Due to conveyance hurdles, Reclamation envisioned the CV Contractors would obtain their CVP supplies from other CVP contractors via exchange. This CVP water is subordinate in priorities for pumping by DWR.

The CVC is a privately owned and operated canal that was constructed in the mid-1970's through a collaborative effort of several state and federal water districts. In 1975, the CVC was completed bringing water from the Aqueduct near Taft, California through a series of six pump lifts to the east side of the San Joaquin Valley near the city of Bakersfield. Originally CV Contractor's CVP water supply was envisioned to be delivered to AESWD in exchange for a portion of its Friant Division CVP water supply available through Millerton Lake. The CVC allows water to be conveyed between the Aqueduct and the FKC. The FKC is owned by Reclamation however, it is currently operated and maintained by the Friant Water Authority (FWA).

Although for a period of time the County's exchange relationship with AEWSD had been suspended, recently, the County has redeveloped an exchange relationship with AEWSD

County of Fresno

The County has a CVP water service contract for 3,000 af of water. The County currently serves this water to one entity, CSA #34, who typically utilizes the supply for M&I purposes – delivery to Brighton Crest. (Transfer of this water is another option that has been exercised, although not

recently.) The County draws its water directly from Millerton Lake after their CV Delta supply has been exchanged for Friant supplies. However, recently the County had been unable to find an exchange partner for delivery of their CVP water, therefore they must rely upon transfers from the City of Fresno (Ci of Fresno) or Fresno Irrigation District (FID).

Year	**South of Delta Allocation – (af) (out of 3,000 af)**	**Taken in District (AEWSD's contract supply by exchange) (af)**	**Co of Fresno's Contract Supply Taken by AEWSD (as part of the Article 5 Exchange) (af)**	**Contract Supply Transferred In (af)**	**Contract Supply Transferred Out (af)**
1995	100% 3,000	356			
1996	95% 2,850	377			
1997	90% 2,700	507			
1998	100% 3,000	385			
1999	75% 2,250	427			2,100 to Westlands Water District
2000	65% 1,950	410			
2001	49% 1,470	540	1,437		
2002	75% 2,250	478	1,950		
2003	75% 2,250	465	216		
2004	70% 2,100			474 (transfer in from FID/Ci of Fresno – not part of Co of Fresno's contract supply)	1,950 to Westlands Water District

Year	South of Delta Allocation – (af) (out of 3,000 af)	Taken in District (AEWSD's contract supply by exchange) (af)	Co of Fresno's Contract Supply Taken by AEWSD (as part of the Article 5 Exchange) (af)	Contract Supply Transferred In (af)	Contract Supply Transferred Out (af)
2005	75% 2,250	500		466 (transfer in from FID/Ci of Fresno – not part of Co of Fresno's contract supply)	2,250 to Westlands Water District
2006	100% 3,000			497 (transfer in from FID/Ci of Fresno – not part of Co of Fresno's contract supply)	
2007	50% 1500			548 (transfer in from FID/Ci of Fresno– not part of Co of Fresno's contract supply)	

Table 1 County of Fresno Supply and Deliveries (All water supplied to the County has gone to Brighton Crest to date.)

Fresno County Service Area #34

Pursuant to the County of Fresno's water service contract, CVP water is delivered to CSA #34. Currently the amount of water that CSA #34 receives is approximately 500 af/y, which is delivered within the current service area boundaries encompassing Brighton Crest. CVP water supply from Millerton Lake has been allocated for the Specific Plan site and surrounding areas under agreements with CSA #34. This water allocated for use within the CSA #34 boundaries is up to 1,242 af/y (Millerton SP 1999.) The reliability of this supply has been reduced due to Delta environmental requirements and pumping constraints and priorities in the Delta. In some years, the County's CVP supply (as well as that of the other CV Contractors) has not been able to be fully pumped or delivered.

It is expected the full build-out of MNT would be 10,000 people. The total af/y of water use would be approximately 3.69 af per day (1,423 af/y). Figure 5 includes water for non-residential support uses such as school, landscaping, commercial and governmental uses. Water sources include limited groundwater supplies or direct diversion of CVP water from Millerton Lake. Planned build out for Tract #4870 is 161 homes utilizing 88 af /y.

Pumping from the Millerton Lake

Water for Tract 4870 would be diverted using an existing intake structure and pump already utilized by Brighton Crest. This intake structure is situated in Winchell Cove within Millerton Lake. The Millerton Lake intake structures have adequate capacity to withdraw the water required to meet all of the required demands of those properties in the Specific Plan and annexations.

Regional Hydrology

Rainfall in the region averages 14 inches per year. MNT lies within a small drainage system, which is tributary to Little Dry Creek. Its headwaters are near Table Mountain. The seasonal stream (White Fox Creek) runs through the MNT lands and is the primary drainage feature on the property. The site drains to the southwest into Little Dry Creek.

The Tract #4870 development along with the MNT development would result in increases of drainage into Little Dry Creek which is within a flood prone zone for a 100-year event. Base elevations for this zone have not been determined. Reclamation does not have land use authority and MNT has already been approved by the County and the Local Area Formation Committee (LAFCO).

White Fox Creek intermittently flows through MNT for 1.8 miles (mi). It converges with Little Dry Creek 4.3 mi downstream and Little Dry Creek enters the San Joaquin River after flowing another 2.1 mi. Thus, 6.4 mi of intermittent creek channel separates the project area from the San Joaquin River. Although Little Dry Creek generally contributes little to the flow volume of the San Joaquin River, it can provide substantial flow during storm events (McBain & Trush, Inc. 2002). Thus, activities that degrade water quality or reduce flows in Little Dry Creek have the potential to affect the San Joaquin River Restoration Program and listed fishes, should they return following implementation of the program.

The rivers in the project area are managed for flood control and irrigation utilizing dams for regulation and storage. Releases from the dams occur in response to high water flows or to meet irrigation demands and minimum flow requirements to benefit fish, wildlife and recreational uses. Typically, minimum flow requirements are maintained while the hydrological conditions dictate the amount of water diverted to meet irrigation demands. Telemetric systems are used to record flows and the watermasters coordinate with the water districts to open or close their gates

for diversions of water on a real-time basis to ensure appropriate flows are maintained throughout the course of the rivers.

Millerton Lake

Millerton Lake is on the San Joaquin River and is located approximately 12 miles northeast of the Fresno-Clovis metropolitan area. The lake is 12 miles long with a storage capacity of 500,000 af and is a major flood control/recreation reservoir. Millerton Lake was formed by the construction of Friant Dam as part of Reclamation's CVP. CVP water is impounded in the lake and diverted into the Madera Canal and FKC for delivery to CVP contractors.

Friant-Kern Canal

The FKC carries water over 151.8 miles in a southerly direction from Millerton Lake to the Kern River, four miles west of Bakersfield. The water is used for irrigation supplies in Fresno, Tulare, and Kern Counties. A small percentage of the water is also used for M&I. Construction of the canal began in 1945 and was completed in 1951. The canal has an initial capacity of 5,000 cubic feet per second that gradually decreases to 2,000 cubic feet per second at its terminus in the Kern River (Reclamation 2006).

Cross Valley Canal

The CVC extends from the Aqueduct near Tupman to Bakersfield. It consists of four reaches which have capacities ranging from 890 cfs through the first two pump plants to 342 cfs in the unlined extension near Bakersfield.

The canal is a joint-use facility operated by the Kern County Water Agency (KCWA) for the CVC participants. CVP and State Water Project water supplies as well as private supplies can be conveyed through the CVC to the Kern Water Bank, the City of Bakersfield 2800 Acres, the Berrenda Mesa Property, the Kern River channel, Pioneer Banking project and the various KCWA member unit's recharge sites.

The CVC is also used to convey banked groundwater after it is recovered. Once in the CVC, recovered water can be delivered to CVC participants in exchange for water in the Aqueduct or in the FKC. During periods when water is not available for exchange, the CVC can be operated in reverse flow. When operated in reverse flow, water flows from the CVC directly into the Aqueduct. In 1991, water levels in the Aqueduct were low enough for gravity flow. When water levels in the Aqueduct are too high for gravity flow, the water must be pumped into the Aqueduct.

Groundwater Resources

Groundwater occurs in granitic rock in fracture zones in the deeper hard rock and the weathered rock upper zone. The ability of the deeper hard rock to store and transmit water is solely

dependent upon the development of secondary openings, such as fracture and joint systems. The amount of storage in fracture (pr joint) zones is generally very limited, but these systems are of interest because of their ability to transmit water from areas of more favorable storage. The weathered rock of the upper zone has the greatest potential for storage, depending on the thickness of the weathered material. (DEIR 1984)

The majority of the town site is a broad, gently sloping valley with a weathered rock base 40 – 70 feet thick. This weathered rock has the potential for holding and transmitting substantial amounts of water. In the hilly areas surrounding MNT, the weathered granitic layer is thin and has a lower water holding potential than the valley areas. A review of well logs shows that the amount of water and the depth at which it may be found vary greatly. Well tests completed for Tentative Tract 3345 were in a range of 5 gallons per minute (gpm) to 160 gpm. A safe, long-term groundwater source was found to be sufficient for 101 homes to be located in this area both north and south of Mlllerton Road. (DEIR 1984)

BS&K Associates, in their 1978 investigation for the Titus EIR, concluded that the Specific Plan area has by far the most favorable groundwater recharge and storage conditions for the entire 1342 acre area analyzed at that time. There are two wells within the core, a shallow 25 – 30 foot well operated by a windmill and an additional shallow well operated by a pump; well tests on the second well yielded an average flow of 50 gpm.

To the east and southeast of the project site, availability of sufficient groundwater for conventional domestic wells is marginal and sometimes non-existent. Typical well production in those areas is five gpm and less for many individual wells.

Groundwater in the general area is believed to be of good quality. Precipitation is probably the major source of water introduced into the project area. The weathering of two mineral groups in the soil and rock, micas and feldspars, contributes the bulk of the dissolved solids to percolating water. Well tests in the vicinity indicate that water quality is typical for foothill wells and is “of excellent chemical quality for domestic use.” (DEIR 1984)

3.1.2 Environmental Consequences

No Action Alternative

There are no impacts to water resources under the No Action Alternative. No new supplies of water would be generated as the same amounts of water that have historically been pumped and exchanged would continue and no additional water supplies would be diverted from reservoirs or rivers. The Central Valley Project Improvement Act (CVPIA) Programmatic Environmental Impact Statement and Operations Criteria and Plan assumed the 128,300 af/y of water would be diverted, pumped from the Delta and conveyed every year. County contract deliveries and exchanges have been occurring annually since the mid 1980s (see Table 1). Surface water

delivery of CVP water including transfer and exchange actions would be expected to remain consistent with historic actions. No groundwater pumping for Tract 4870 would occur. Groundwater conditions would remain as they have historically.

Local governmental agencies responsible for planning and land use would determine if alternate water supplies are available to support the development of Tract 4870. The source of the alternative water supply is speculative at this time. Therefore there would be no impact to surface or groundwater water.

Proposed Action

CSA #34 (MNT) Under the Proposed Action, Tract 4870 would have a supply of water to serve newly constructed homes and businesses as planned in the MNT SP. The water supply demand of the new development in Tract 4870 would be approximately 88 af. All new homes would be installed with meters to encourage water conservation. Tract 4870 would rely solely on CVP surface water. The diverted water would be pumped to a treatment plant. After treatment, water would be stored in two 350,000 gallon tanks and then distributed throughout the system in accordance with the Storage and Distribution Plan. A water treatment plant would be located adjacent to the waste water treatment plant. The water treatment and distribution system would be designed and financed in accordance with the infrastructure plan. CSA #34 is responsible for the operation and maintenance of the distribution system and the design would provide sufficient supplies for domestic, commercial and fire flow requirements. Reliability and design requirements would adhere to established standards of the RWQCB, and Department of Health Criteria.

The Proposed Action would not interfere with the normal operations of the CVP facilities, nor would it impede any CVP obligations to deliver water to other contractors or to local fish and wildlife habitat. Imported CVP water combined with precipitation may cause year around surface saturation within shallow swales. Thus, surface water resources would not be adversely impacted by the Proposed Action.

The water that could be applied to the included lands is already allocated. No additional water supplies would be diverted from rivers or lakes. No new construction or construction of new points of diversions would be required; however, changes in timing and locations of when and where water is diverted could occur.

Even though construction of residential Tract 4870 (and related infrastructure) would result in considerable cut-and-fill grading, leaving exposed soils vulnerable to erosion, the Proposed Action is not expected to affect the San Joaquin River restoration program or the fishes, as it would not adversely affect the flow volume, sediment discharge, or water quality of White Fox Creek. An erosion control plan would be implemented as required by the Mitigation Measures and Monitoring Program Matrix for the Millerton Specific Plan Area. Such a plan would also be

a required component of a General Construction Permit that must be obtained from the RWQCB - Central Valley Region. The revegetation of exposed slopes would be one component of the erosion control plan. Plant species appropriate for erosion control are native species that quickly become established, and whose roots bind the soil

Furthermore, the development of Tract 4870 (and related infrastructure) provides for an open space corridor along White Fox Creek. Should tributary wetland swales be temporarily impacted as a result of installing infrastructure to connect the tract with the existing wastewater treatment plant, the activities would fully comply with the provisions of Corps Nationwide Permit No. 29 that applies to residential developments. Furthermore, should wetlands be temporarily affected, a Water Quality Certification from the RWQCB covering those activities would be obtained in compliance with Section 401 of the Clean Water Act.

The dynamics of surface water infiltration and groundwater recharge would change as a result of the introduction of impervious surfaces and introduced nuisance flows, but impacts on flows and water quality into Little Dry Creek over 4 mi from the Tract 4870 development area (and related infrastructure) would be undetectable as surface water would be collected in an on-site sedimentation basin, which would provide an alternative method for lateral underground flow to White Fox Creek. The sedimentation basin is designed per the specifications of the Extended Detention Basin, listed as a Best Management Practice (BMP) in the California Stormwater Best Management Practices Handbook (California Stormwater Quality Association 2004). The basin would be designed to store stormwater for a minimum amount of time to allow particles and associated pollutants to settle.

The western portion of the project area is covered by the JPJCE. The goal is to ensure that the preserved wetland, riparian, and upland habitats within the JPJCE are maintained in good condition. Consequently, managing the JPJCE to preserve water quality conditions within the wetland and riparian areas are an integral part of the Management and Monitoring Plan.

The proposed expansion of the County's service area boundary and ultimate deliveries of CVP water to Tract 4870 would not result in impacts to third parties, water quality, quantity, flows or temperature. The proposed inclusion also would not interfere with deliveries to other water purveyors or meeting minimum flow requirements.

Groundwater The Proposed Action would reduce current infiltration rates due to impervious surfaces. Higher run off velocities and volumes have been calculated. Recharge in the project area to weathered granitic layers currently comes from precipitation. Imported Millerton Lake water would allow for larger quantities of water to infiltrate over a twelve month season. This imported water combined with precipitation would allow for the recharge of fractures and

improve future groundwater supplies. The Proposed Action has no adverse impact on groundwater and may provide a small benefit by providing percolation in the dry season.

Cumulative Effects

The recent court decision to release up to 220,000 af/y of water down the San Joaquin River (San Joaquin River Settlement Agreement) could result in less Friant Division CVP water available for exchange and increase the extraction of groundwater to meet existing demands where available. Groundwater quantity would be reduced and quality would be degraded. The Proposed Action does not result in changes in groundwater uses. The amount of water involved is small. The Proposed Action would not contribute to, or inhibit, the renewal of CVP long-term contract renewals for other CVP contractors. No additional water would be diverted or pumped.

The reservoirs, rivers and creeks in the lower San Joaquin Valley associated with the Proposed Action are managed for flood control and agricultural supplies. Diversions of water occur based on the hydrological and environmental conditions. During wet seasons and high water flows, surplus water supplies are released and, if possible, marketed to quickly disperse this water to avoid flooding and damage downstream in the rivers. The Proposed Action would not interfere with deliveries, operations or cause significant adverse changes to the rivers, creeks or conveyance facilities.

The conveyance facilities and river systems in the lower San Joaquin Valley are interconnected and allow for a myriad of transfers, exchanges, contract assignments, and conveyances of water via Warren Act Contracts, Operational Contracts or Article 55 of the SWP. The conveyance of water under these water service options are subject to available capacity, meeting primary requirements, and environmental reviews.

The Proposed Action would not contribute to or interfere with flood control management and operations. The Proposed Action and imbalanced exchanges would not increase or decrease the availability of flood water nor inhibit or contribute to decisions to accept or reject this source of water.

3.2 DRAINAGE AND RUNOFF

3.2.1 Affected Environment

Three seasonal drainages, including White Fox Creek and two tributary drainages, pass through the vicinity of the action area. Flows in these drainages are continuous for weeks or perhaps months at a time during wet winters, but these drainages are dry, or support scattered ponded areas, during the summer and fall. The two tributary drainages are fed by springs and pass through portions of the action area before joining White Fox Creek. White Fox Creek drains along the western edge of the Tract 4870 improvements and along the southeastern edge of the JPJCE. The small tributary drainages carry modest surface flows and the swales that these flows pass through are more likely to have saturated soils than conspicuous surface flows.

MNT is situated in three basins. Basin A is comprised of 88 acres ranging in elevation from 580-920 feet and discharges into Millerton Lake and Winchell Cove. Peak storm runoff (100-year storm) is estimated to be 84 cubic feet per second (cfs). Basin B is 250 acres ranging from 580-965 feet in elevation and discharged into Millerton Lake at the boat ramp. Peak storm runoff is estimated to be 190 cfs. Basin C is 5,425 acres ranging in elevation from 305-1,500 feet and discharges into Little Dry Creek approximately 1 ½ miles east of the San Joaquin River. Basin C includes portions of Basins D and E. The peak storm water runoff is estimated to be 1,240 cfs. The peak discharge of Basin C into Little Dry Creek is significantly reduced because of the "throttling" effect that two culverts under the FKC have on the peak discharge of Basins D and E. This box culvert is designed to pass about 280 cfs.

Basin E is a portion of Basin C and lies upstream of the FKC and would initially receive the storm water runoff from MNT. The peak runoff from Basins D and E is estimated to be 1,530 cfs. Reclamation, in the design of the FKC, estimated the 100-year storm runoff to be 1,200 cfs for Basin E. The seasonal stream (White Fox Creek) traversing the MNT site collects storm water, crosses under the FKC and ultimately discharges into Little Dry Creek approximately 1 ½ miles from the San Joaquin River.

Little Dry Creek is a 78 square mile basin which discharges into the San Joaquin River approximately 4 miles downstream of Friant Dam. (DEIR, 1984)

3.2.2 Environmental Consequences

No Action Alternative

The County's delivery of CVP water to CSA #34 to serve development of Tract 4870 would not occur. Sewer and drainage management, infrastructure and services may be delayed. The development of Tract 4870 could be limited due to a limited water supply.

Proposed Action

The development and construction of Tract 4870 could proceed as planned for full build-out under the Proposed Action. The stormwater drainage was addressed in the incorporated by reference EIRs. According to the MNT Specific Plan Draft EIR (May 1984), an additional 130 cfs of runoff would occur over the entire MNT so a much smaller amount would correspond with Tract 4870. Since Tract 4870 is 83 acres of the total 1,416 acres of MNT, runoff from this parcel would generally be 7.6 cfs or about six percent of the total runoff. This would not impact an existing inadequate box culvert under the FKC and lead to minor back up of flood waters at the location. A preliminary drainage plan is proposed to limit impacts. This drainage plan would be provided to Reclamation and the Friant Water Authority for review. Drainage would be via natural drainage courses leading eventually to the San Joaquin River.

The quality of runoff to the San Joaquin River is not expected to differ substantially from existing quality in the river due to dilution. Fecal coliform levels in the storm water runoff would undoubtedly exceed the water quality objective of the river, even though the river does not meet the criteria now.

The seasonal stream (Little Dry Creek) crossing south of Millerton Road is subject to flooding during a 100-year storm event. The Specific Plan proposed channelization and parkway development along the streams to remediate for potential flooding.

Cumulative Impacts

The Proposed Action results in a slight increase in additional drainage; however, this increase has been planned for and addressed through the site plan. Other residential developments would proceed with or without the inclusion. The runoff from Tract 4870 and developments in the vicinity could result in additional drainage into nearby streams and rivers in addition to the flow through the culvert boxes under the FKC. Water quality could be degraded without proper design and construction. MNT or their contractor would be responsible for obtaining approvals of designs by Reclamation's engineering department and the County. The development projects are designed and constructed in accordance with applicable regulations and BMPs. The developments are approved by the County and the construction plans are approved by the County Planning Department.

The recent court decision for additional releases down the San Joaquin River reduces water to water districts in Fresno, Madera, Tulare and Kern Counties. This reduction results in less CVP water available to transfer or exchange and could spark requests for transfers of non-CVP supplies.

3.3 Land Use

3.3.1 Affected Environment

The project area is located in eastern Fresno County (Figure 1). The County is situated in the center of the San Joaquin Valley, extending from the coastal ranges eastward to the crest of the Sierra Nevada. Residential and commercial development, including Brighton Crest and Table Mountain Casino, and the Ventana Hills subdivision, occur in the vicinity of the project, although the majority of the land base remains annual grassland and blue oak woodland used for livestock production.

The majority of the non-native grassland habitat within the Tract 4870 development area (with related infrastructure) was modified by grading in the spring of 2004 to construct level terraces for home sites. The subsoil exposed by cut-and-fill grading currently supports a limited amount of vegetation, and large areas support no vegetation. The land in and around CSA #34 is grazed by cattle.

3.3.2 Environmental Consequences

No Action

The construction associated with the planned growth at Tract 4870 could be stalled until an alternate and reliable source has been secured. Changes in land use could be delayed until a willing seller of water has been identified. The land would remain a graded tract within the surrounding rolling hills and grasslands

Proposed Action

Land use changes for Tract 4870 would constitute the building of approximately 161 new homes. This land use change was addressed in the Fresno County General Plan and MNT Specific Plan and Amendments. The impacts to land uses were analyzed in the EIR for the County General Plan and MNT Specific Plan EIR.

The land use is currently grasslands. Grasslands, when converted to an urban use, are considered an irreversible change in the environment. Loss of grasslands used for grazing cattle can have impacts on the local economy by reducing the amount of money flowing into the community from agriculture. The County considered the conversion of these grasslands to urban use as an unavoidable impact in the associated EIRs for the County General and Specific Plans. The EIRs addressed and analyzed the impacts of and mitigation for changes in land use and mitigation for changes in land use and are hereby incorporated by reference.

Reclamation has no land use authority. As such, the federal action would not trigger any land use changes that have not already been analyzed in the incorporated by reference County General and Specific Plan EIRs.

The Proposed Action allows water deliveries to Tract 4870 to support the planned growth in MNT. CSA #34 already has a firm supply of 1,390 af/y from the County to support this growth. At the inception of the planning efforts it was believed that MNT was within Reclamation's M&I POU. Allowing the delivery of CVP water by expanding the County's service area boundary will allow water deliveries to Tract 4870 which is already slated for development. The amount of water is small and does not lead to additional homes or businesses beyond those addressed in the County General and Specific Plans.

Cumulative Impacts

According to the County General Plan additional residential communities are planned in the vicinity. The County has also adopted the Friant Community Plan which contains land use proposals for this unincorporated community. According to the Friant Community Plan, the population in Friant is expected to grow. The Proposed Action does not trigger additional land conversions. The conversion of Tract 4870 to homes contributes to the cumulative changes in land use when added to other development projects in the MNT area, the County and in the San Joaquin Valley. Economic factors are driving farmers out of business and enticing them to sell their lands to developers. This trend is expected to continue since home prices in the San Joaquin Valley are typically lower compared to mountain and coastal communities. Reclamation does not have land use authority. LAFCO, cities and counties are responsible for planning for growth and land use changes. The County and LAFCO approved MNT on the basis that water supplies under the County's CVP water service contract were adequate.

3.4 Biological Resources

3.4.1 Affected Environment

CSA #34

The following list was obtained on April 16, 2008 from the Sacramento Fish and Wildlife Service website http://www.fws.gov/sacramento/es/spp_lists/QuickList.cfm for MNT which is wholly within the Friant quadrangle of the U.S.G.S. 7 ½ minute maps.

Table 2 Species List of Special Status Species in Friant Quad

Species	Status	Habitat	Occurrence in the Action Area*
Invertebrates			
Conservancy Fairy Shrimp *(Branchinecta conservatio)*	FT	Primarily found in vernal pools of the Central Valley and Coast Ranges. This species may occur in other degraded seasonal wetlands.	**Unlikely**. Vernal pool habitat required by this species is absent from Tract 4870 (and related infrastructure), and wet and dry season surveys did not detect this species within suitable habitat elsewhere in the action area.
Vernal Pool Fairy Shrimp *(Branchinecta lynchi*)	FT	Primarily found in vernal pools of the Central Valley and Coast Ranges. This species has been documented in the Millerton Specific Plan Area (Jones and Stokes 1997, 1998) and on lands south of Friant (Hathorn 1994).	**Present**. Vernal pool habitat required by this species is absent from Tract 4870 (and related infrastructure); however, surveys within suitable habitat elsewhere within the action area detected this species.
Vernal Pool Tadpole Shrimp *(Lepidurus packardi)*	FE	Primarily found in deep vernal pools of the Central Valley and basalt tabletops of the Sierra foothills.	**Unlikely**. Vernal pool habitat required by this species is absent from Tract 4870 (and related infrastructure), and wet and dry season surveys did not detect this species within suitable habitat elsewhere in the action area.
Valley Elderberry Longhorn Beetle *(Desmocerus californicus dimorphus)*	FT	This species is dependent on mature elderberry shrubs for foraging, breeding, and cover; occurs in the Central Valley and Sierra Foothills.	**Absent**. Elderberry host plants are absent from the action area.
Fish			
Chinook Salmon -Central Valley Spring Run ESU (*Oncorhynchus tshawytscha)*	FT, CT	Rivers and their tributaries within the southern Central Valley that have not been blocked by dams or where water has been removed for agricultural uses.	**Absent**. The Action Area is outside the current range of this species. Currently, Chinook salmon can not ascend the San Joaquin River to access tributary drainages such as Little Dry Creek; however, the San Joaquin River Restoration Program aims to restore and maintain fish populations in the San Joaquin River.
Central Valley Steelhead *(Oncorhynchus mykiss*)	FT	Rivers and their tributaries within the southern Central Valley that have not been blocked by dams or where	**Absent**. The action area is outside the current range of this species. Currently, Central Valley steelhead can not ascend

Species	Status	Habitat	Occurrence in the Action Area*
		water has been removed for agricultural uses.	the San Joaquin River to access tributary drainages such as Little Dry Creek; however, the San Joaquin River Restoration Program aims to restore and maintain fish populations in the San Joaquin River.
Delta Smelt *(Hypomesus transpacificus)*	FT	Endemic to the upper San Francisco estuary, primarily below Isleton on the Sacramento River and below Mossdale on the San Joaquin River side.	**Absent**. The action area is outside of this species' range.
Amphibians			
California Tiger Salamander *(Ambystoma californiense)*	FT, CSC	Found primarily in annual grasslands; requires vernal pools or other suitable aquatic habitat for breeding and rodent burrows for refuge.	**Present.** Vernal pool or other breeding habitat is absent from Tract 4870; however, surveys detected this species within suitable habitat elsewhere in the action area and CTS may aestivate within Tract 4870.
California Red-legged Frog *(Rana aurora draytonii)*	FT, CSC	Rivers, creeks, and stock ponds of the northern Sierra foothills and Coast Ranges; prefers perennial pools with overhanging vegetation.	**Absent.** This species once occurred in rivers and creeks of the Sierra foothills, but it has been extirpated from its former range in Madera and Fresno Counties by the introduction of warm water fish and bullfrogs (Jennings and Hayes 1994). Red-legged frogs were last seen in the area in the early 1970s (Mark Jennings, pers. comm.).
Reptiles			
Blunt-nosed Leopard lizard *(Gambelia sila)*	FE, CE	Semi-arid grasslands, alkali flats, and washes, containing sandy, gravelly, loamy, or occasionally hardpan soils.	**Absent.** The action area is outside of this species' range.
Giant Garter Snake *(Thamnophis gigas)*	FT, CT	Freshwater marshes and low gradient streams with emergent vegetation; adapted to drainage canals and irrigation ditches with mud substrate.	**Absent.** The action area provides no habitat for this species and lies well outside of its range.
Mammals			
Fresno Kangaroo Rat	FE, CE	This species is restricted to desert alkali scrub and	**Absent**. The action area is outside of this species' range.

Species	Status	Habitat	Occurrence in the Action Area*
(*Dipodomys nitratoides exilis*)		alkali grassland of Fresno County. It requires vegetated mounds with friable soils.	
San Joaquin Kit Fox *(Vulpes macrotis mutica*)	FE, CT	This species occurs in desert alkali scrub and annual grasslands within and at the margins of California's southern Central Valley. The kit fox is also known to occasionally forage in adjacent agricultural habitats.	**Unlikely**. The action area is at the limit of the species occupied range and focused surveys in recent years have not detected kit foxes.
Plants			
Succulent Owl's Clover *(Castilleja campestris* ssp. *succulenta)*	FT, CE, CNPS 1B	Occurs in Northern Claypan and Northern Hardpan vernal pools within annual grassland communities.	**Possible.** Vernal pool habitat is absent from Tract 4870 (and related infrastructure). Suitable habitat occurs elsewhere in the action area but the species was not detected during surveys.
San Joaquin Valley Orcutt Grass *(Orcuttia inaequalis)*	FE, CE, CNPS 1B	Occurs in Northern Basalt flow, Northern Claypan, and Northern Hardpan vernal pools within annual grassland communities.	**Possible.** Vernal pool habitat is absent from Tract 4870 (and related infrastructure. Suitable habitat occurs elsewhere in the action area but the species was not detected during surveys.
Hairy Orcutt Grass *(Orcuttia pilosa)*	FE, CE, CNPS 1B	Occurs in Northern Basalt flow, Northern Claypan, and Northern Hardpan vernal pools on high or low stream terraces or alluvial fans.	**Unlikely.** Vernal pool habitat is absent from Tract 4870 (and related infrastructure). Suitable habitat occurs elsewhere in the action area but the species was not detected during surveys, and there are no current or historical occurrences of this species in Fresno County.
Hartweg's Golden Sunburst *(Pseudobahia bahiafolia)*	FE, CE, CNPS IB	Occurs in open grasslands and grasslands at the margins of blue oak woodland, primarily on shallow, well-drained, fine-textured soils, nearly always on the north or northeast facing slopes of Mima mounds.	**Absent**. In Fresno County, this plant is strongly associated with Rocklin sandy loam, pumiceous variant, which is absent from the Action Area. This species was not observed on site during any previous plant surveys.
San Joaquin Adobe Sunburst (*Pseudobahia peirsonii*)	FE, CE, CNPS 1B	Occurs in grasslands of the western foothills of the Sierra Nevada in heavy clay soils of the Porterville, Cibo, Mt. Olive, and Centerville series.	**Absent**. Heavy adobe clay soils in which this species most often occurs are absent. This species has not been observed in the action area during previous plant surveys.

*Definitions Regarding Potential Occurrence:

Present: Species or sign of their presence observed in the Action Area

Likely:	Species or sign not observed in the action area, but reasonably certain to occur in the action area
Possible:	Species or sign not observed in the action area, but conditions suitable for occurrence
Unlikely:	Species or sign not observed in the action area, conditions marginal for occurrence
Absent:	Species or sign not observed in the action area, conditions unsuitable for occurrence

The lands within CSA #34 are mainly comprised of oaks and non-native grasslands. According to the Draft EIR for the MNT Specific Plan, native vegetation is no longer present due to the grazing that has occurred. On site investigations revealed soft chess (*Bromus mollis*), ripgut brom (*Bromus rigidus*), wild oat (*Averra barbata*) on drier soils and Italian wild rye (*Lolium multiflorum*) on wetter soils. Blue oaks are the dominant tree species. Coffeeberry (*Rhamnus californica*) is found in the northern area planned for commercial use. Digger pine (*Pinus sabiniana*) and manzanita (*Arctostophylos so.*), sandbar willow (*Salix hindsiana*) and western sycamore (*Platanus recemosa*) are located in the seasonal streambed. The seasonal streambed does not support cottonwood or other riparian habitat.

Mammals can be classified into two categories: (1) those that inhabit the site, and (2) those whose range includes the project area. Smaller mammals that inhabit the site include the fisher ground squirrel, pocket gopher, and jackrabbit. Larger mammals that either inhabit the site or whose range includes the site are deer, bobcat, coyote, opossum and skunk.

Several species of birds are known to live in the area. Typical species include quail, dove, hawks, California jay, and many song birds. Millerton Lake and the surrounding area provide winter habitat for seven or eight bald eagles. There are also several golden eagles which occupy the general area of the project. They are year-round residents and probably use the MNT site for foraging.

Several grassland snakes and lizards also occur in the area. The property is within the range of the blunt-nosed leopard lizard, but cultivation and grazing have permanently altered necessary habitat requirements.

Several amphibians and reptiles occur in the project vicinity. Amphibians such as Western toads (*Bufo boreas*) and Pacific treefrogs (*Pseudocris regilla*) breed in stock ponds of the site and are likely to forage in and disperse through adjacent grasslands. Reptiles such as the western whiptail (*Cnemidophorus tigris*) and the western fence lizard (*Sceloporus occidentalis*) occur in this habitat, especially along fence lines and grasslands edges where cover is nearby. Gopher snakes (*Pituophis melanoleucus*) and common kingsnakes (*Lampropeltis getulus*) commonly hunt lizards and small mammals in grasslands which occur in the MNT area. Western rattlesnakes (*Crotalus viridis)* would also be common.

Non-native grasslands of the site are used by various avian species throughout the year. Resident grassland birds seen or heard during surveys include western meadowlarks (*Sturnella neglectga*), mourning doves (*Zenaida macroura*), and California horned larks (Eremophila alpestris actia). Winter migrants include American pipets (*Anthus rubescens*), savannah sparrows (*Passerculus sandwichensis*), and white-crowned sparrows (*Zonotrichia leucophyrs*). Nesting habitat exists for

Western kingbirds (*Tyrannus verticalis*) and Bullock's orioles (*Icterus bullocki*). Resident raptors could include white-tailed kites (*Elanus caeruleus*), red-tailed hawks (*Buteo jamaicensis*), American kestrels (*Falco sparverius*) barn owls (*Tyto alba*), and great horned owls (*Bubo virginianus*). Burrowing owls (*Athene cunicularia*) have been observed in the project area as well.

Two stock ponds exist on the Twin Hills site. The southern stock pond is the smallest and may dry up entirely in some years. The northernmost stock pond appears to receive irrigation runoff from the Brighton Crest Golf Course and water levels remain somewhat constant. Emergent vegetation is limited to the shallows along the shoreline of the ponds. Aquatic plants were not noted.

Figure 7 California Tiger Salamander Critical Habitat in the Vicinity of Tract 4870